J:Barrett E-5 (1908-1909)1925
SD 6 Cayapa SD6

vigesimal nature, but it lacks even so much support as four, and the binary system for it has not even one other number of a form in any way resembling it. On the other hand, though two other terms of the system are held in common with a neighboring language, the terms for four and twenty do not show this indication of possible borrowing either by one people or the other.

An unusual feature here shown is the use of two distinct terms for the same number in two different parts of the system. This occurs in ten, where *pa'it'a* is used up to nineteen; and *ca'ega*, apparently a borrowed term, from thirty up.

The order given to the figures of the various denominations is as follows:

All compound numbers from ten up which contain a figure of the units order have this as the final term. Thus thirteen is ten three. The numbers six to nine are compounds of five with the four lower numbers. Here the same rule is followed and the numbers one to four are terminal.

In all tens and in all hundreds, which in this system include the thousands also, the term tens or hundreds is the final one, being preceded by the number of tens or hundreds in the numeral in question. Thus 40 is four tens, 400 is four hundreds, and 4000 is forty hundreds.

In no case is there found anything in the nature of a connective term between the parts of a compound number.

Following the phonetic laws of the language, certain terms, if not used as the ultimate ones, are changed when they occur in a compound numeral. Thus *pē'ma*

3: Barrett E-5 (1908-1909)1925
SD6 Cayapa SD6

802
•194

is the unit three, and *pa'it'a pîma* is thirteen, but *pî'ê tcûûga* is thirty. So far as two and three are concerned, the change is regular and universal. One changes in the hundreds place in the numerals one hundred to one hundred ninety-nine, and in six when this occurs as a terminal figure. Five has three forms. According to these phonetic laws also, these numbers, when occurring in units or in the units place, undergo the same changes if followed by other terms possessing the necessary sounds. Thus, in the sentence "he has three new ollas," *ya-tci kasa pî'n pta'ma kê*, literally "his new three ollas has," the change of form of the numeral is necessary. Equally correct, however, is *ya-tci kasa pta'ma pîma kê*, in which the surrounding sounds do not necessitate the change. It appears also that the numbers two and three, and perhaps one and five, may exert an influence upon the term following, as in the cases of *pa'i patsa* and *pî'ê batsa*, in which the change of the second term would seem to be related to the preceding sounds.

Rules of Composition

The numbers on which the Cayapa numeral system is based are 1, 2, 3, 5, 10, 20, and 100. On these the composition proceeds as follows:

Four is *ta*-2.

Six to nine are 5-*dic* 1, 2, 3, and 4 respectively.

Ten alone and as a component of the numbers 11 to 19 and other higher numbers in which these occur is *pa'it'a*, a term quite different from tens (*tcû'ûga*) used